

ΔTIZ

User Manual

BOOKSNAPTM

About the Manual

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Atiz Innovation Co., Ltd.

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General Information

Introduction

Thank you for choosing BookSnap, a digital, camera-based, book scanning solution. With BookSnap you are able to create high-quality digital books. This manual will assist you in familiarizing yourself with the device. It contains all the necessary information for set up functions and capabilities.

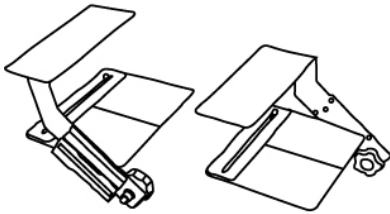
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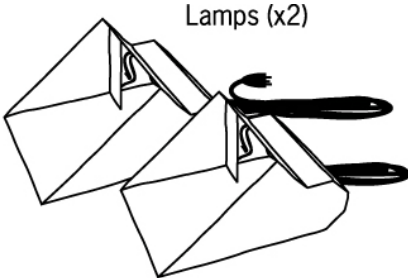
Unique Characteristics of BookSnap

BookSnap is a revolutionary new device that will help users digitize bound content quickly without destroying the book. Its sleek design and unique, gentle, V-shaped book cradle will make capturing images from books, magazines and journals seem as easy as taking a picture with a digital camera. This compact device allows for book digitization at a blazing speed of 500 pages per hour.

Box Contents

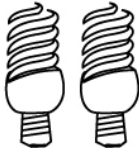


Camera mounting pieces (x2)



Lamps (x2)

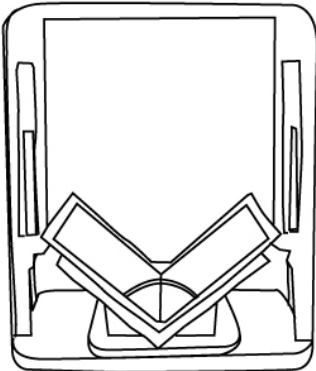
AC cords (x2)



Light bulbs (x2)



Bolts (x2)



BookSnap platform

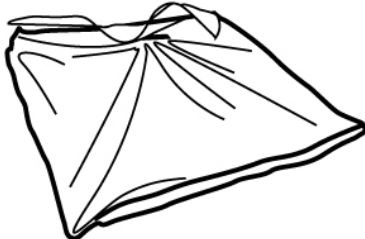


Magnetic bookholders (x2)

Stoppers (x2)



Hexagon screwdriver



Shade

USB hub

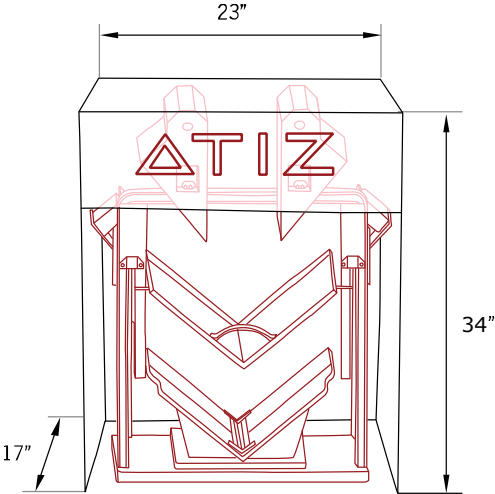


User manual



Software

Dimension & Weight

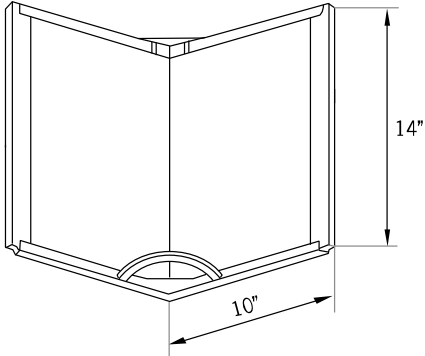


Dimension:
Depth: 17 inches
Width: 23 inches
Height: 34 inches

Weight:
20 kg. (44 lbs.)

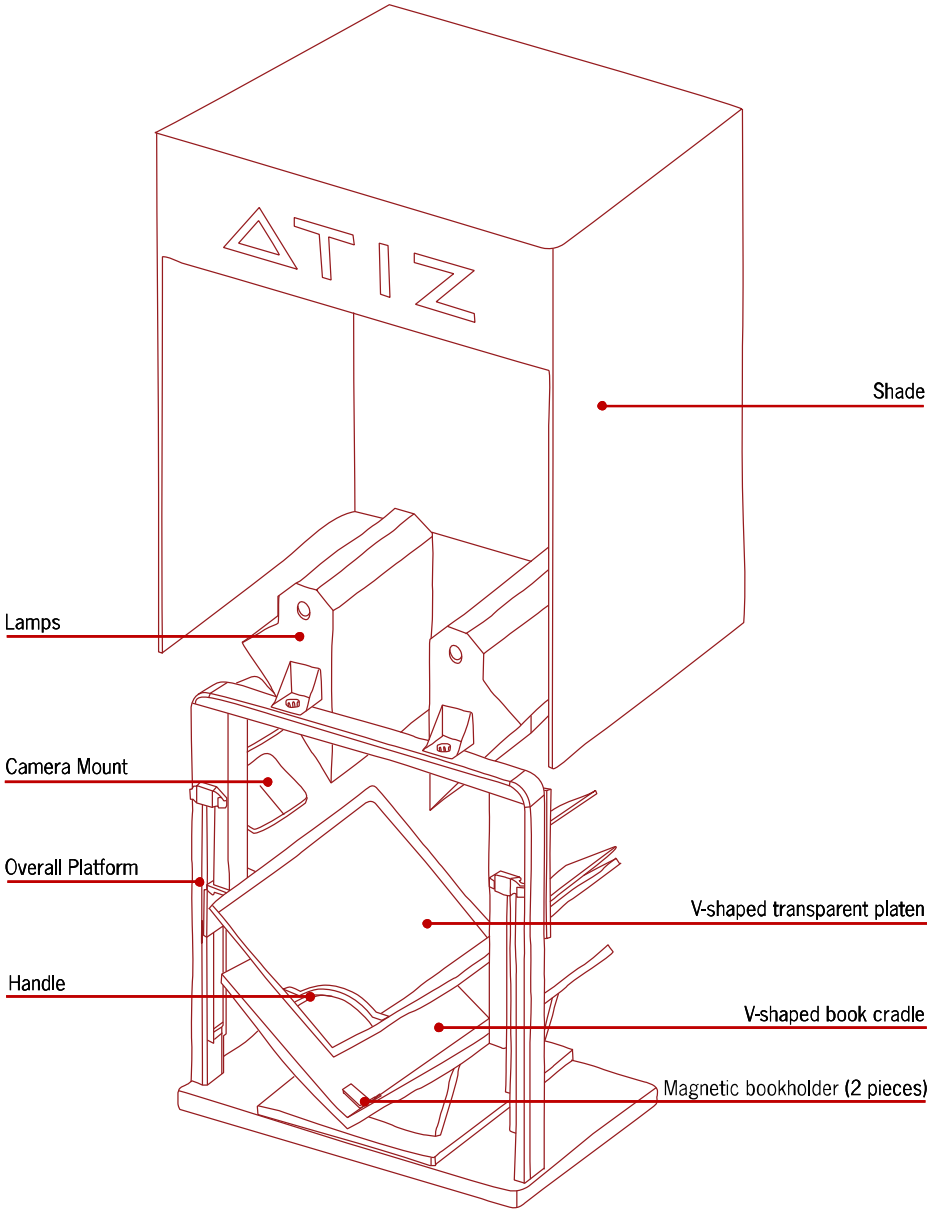
Page Size Support

BookSnap supports pages that are within 10 x14 inches.
Some supported standard sizes include:



- Maximum size 10" x 14"
- Legal 8" x 14"
- Executive 7.25" x 10.5"
- A5 5.83" x 8.27"
- B5 7.17" x 10.12"
- A4 8.27" x 11.69"
- B4 10.12" x 14.33"
- Envelope monarch 3.88" x 7.5"
- Envelope COM10 4.13" x 9.5"
- Envelope DL 4.33" x 8.66"
- Envelope E5 6.38" x 9.02"
- etc.

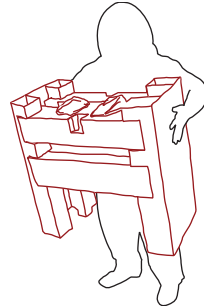
Part Identification



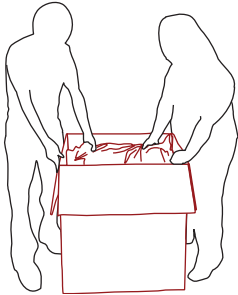
How to Assemble



- 1.** Pull the cardboard holder straight up.



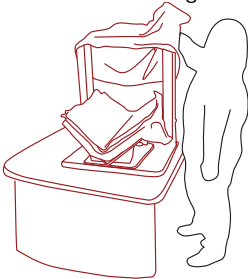
- 2.** Place the cardboard holder on the floor.



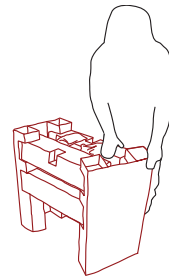
- 3.** Use 2 people to lift BookSnap out of the box. Hold the metal structure when lifting.



- 4.** Lift BookSnap out of the box as shown.

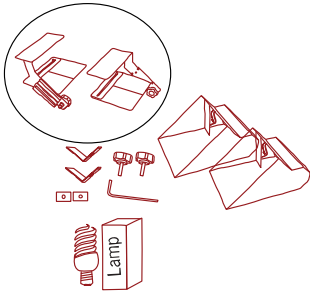


- 5.** Place BookSnap on a table that is level and strong enough to withstand at least 30 kg. (70 lbs.)

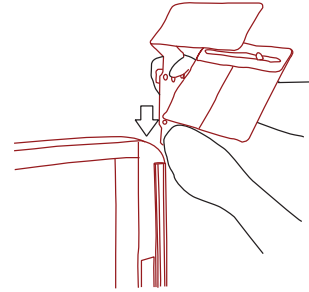


- 6.** Slowly disassemble the cardboard holder.

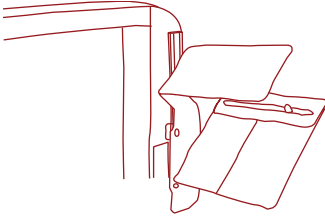
How to Assemble



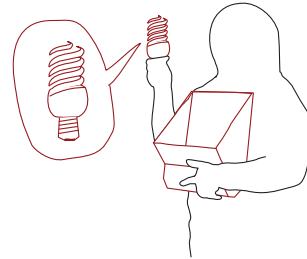
- 7.** The cardboard contains the camera mounts, lamps, bolts, light bulbs, magnetic book holders and hexagon screwdriver.



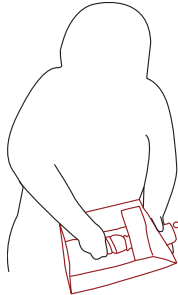
- 8.** Install the camera mount by inserting it into the slot.



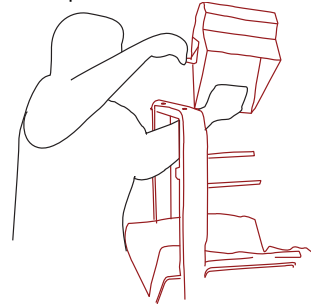
- 9.** The camera mount once installed should look like this.



- 10.** Install the light bulb into the lamp.

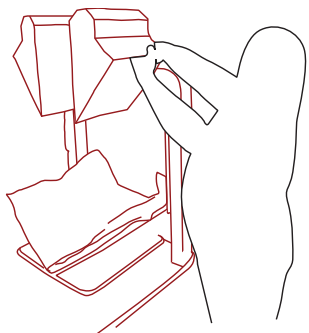


- 11.** Put the light bulb in its socket.

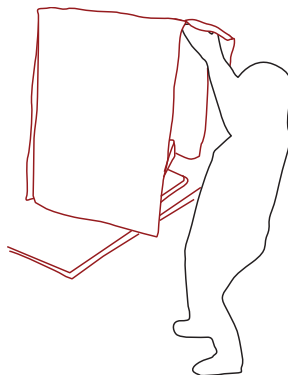


- 12.** Hold lamp with both hands, place it on top on the platform and insert the bolt.

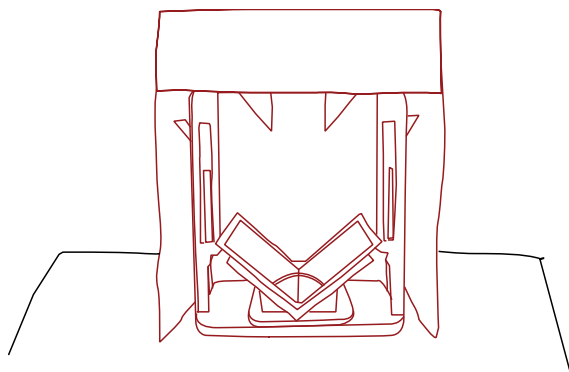
How to Assemble



13. Repeat with the other side.



14. Cover the BookSnap platform with the shade.



15. You have successfully assembled BookSnap!

System Requirements

Operating System	Windows XP (Service Pack 2)
CPU	Pentium 1GHz or Better
RAM	Minimum 512MB (2GB is recommended)
Interface	Hi-speed USB 2.0
Driver	Canon Camera Driver
Display	1,024 x 768 pixels/ High Color (16 bit) or Better

Note:

BookSnap comes with 2 software packages:

1. BookSnap software (for controlling the cameras)
2. BookDrive Editor (for post image processing)

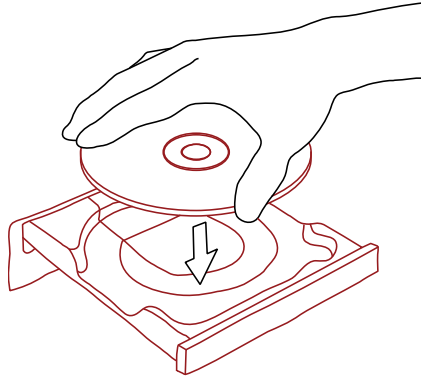
Due to the SDK provided by Canon, BookSnap software currently does not support Windows Vista. It does work only on Windows XP (Service Pack 2).

As for BookDrive Editor, it works on both Windows XP and Windows Vista.

How to Install the Software

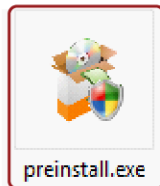
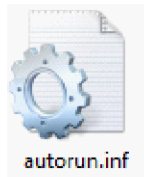
Installation Procedure

1. Close any programs that are running and insert the Atiz software CD into the computer's drive.



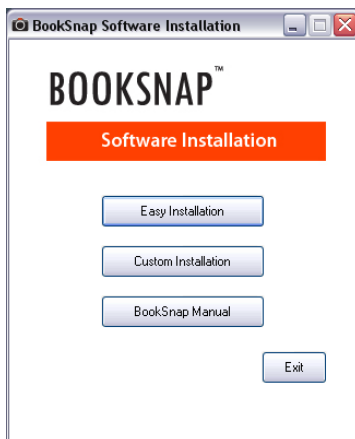
If the installation panel does not appear automatically, please use the following procedure.

- 1 Open **My Computer**
- 2 Right-click the CD-ROM icon and select **Open**.
- 3 Double-click **preinstall.exe**

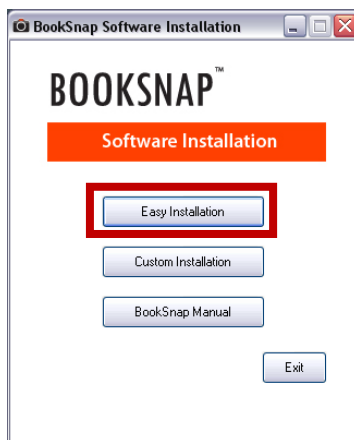


How to Install the Software

2. After a few seconds, you should see the following dialog come up.

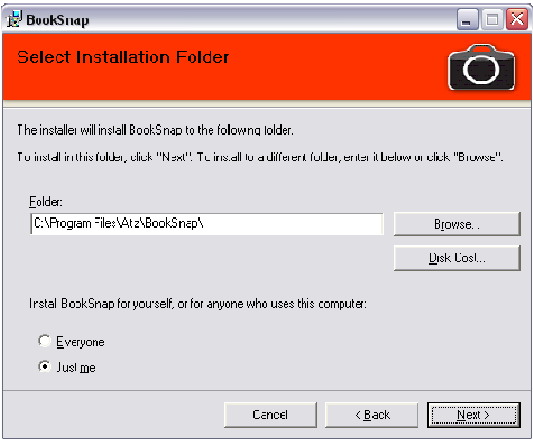
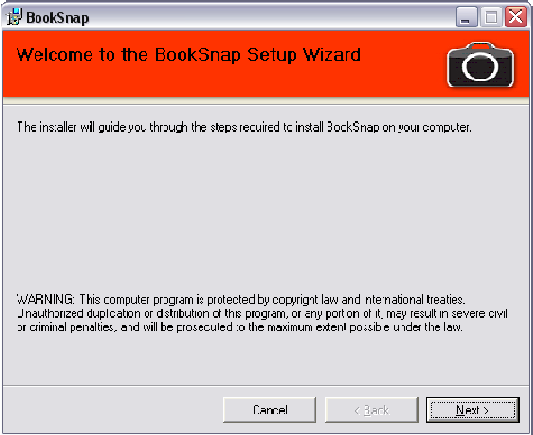


3. Select **Easy Installation**. Two software programs will be installed. They are BookSnap software (for capturing images) and BookDrive Editor software (for processing the images).



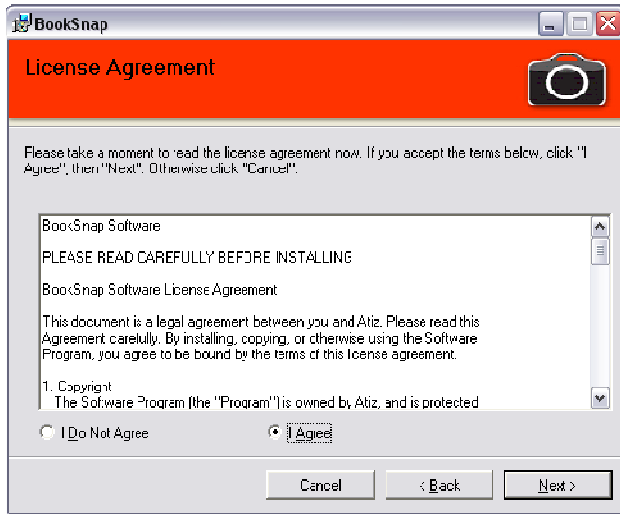
How to Install the Software

4. Proceed to next steps by selecting **Next**.

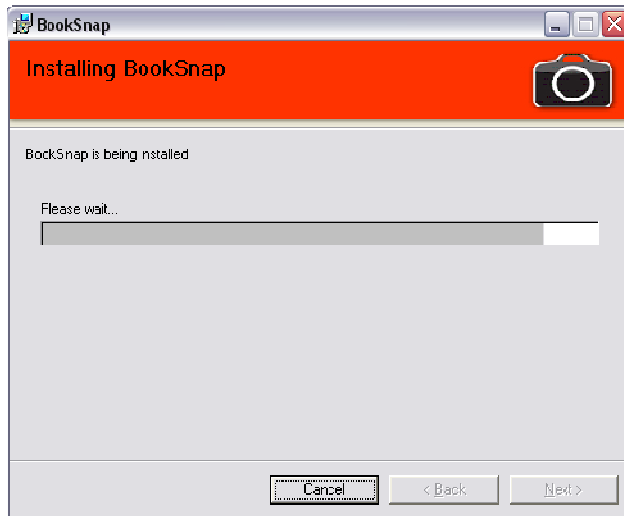


How to Install the Software

5. Please review the License Agreement. If you agree, select **"I Agree"** and click **Next**.

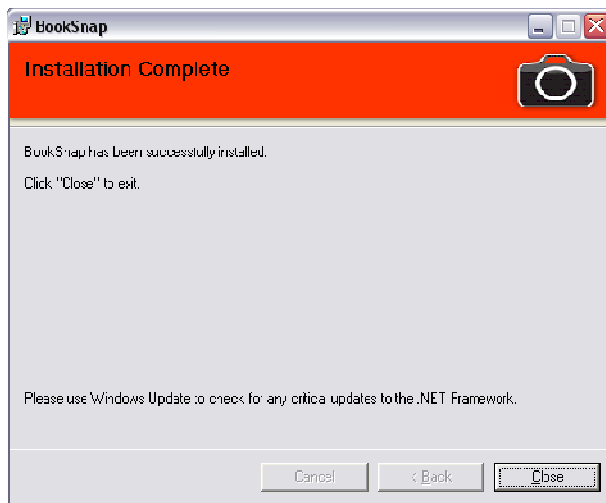


6. BookSnap software will be installed.

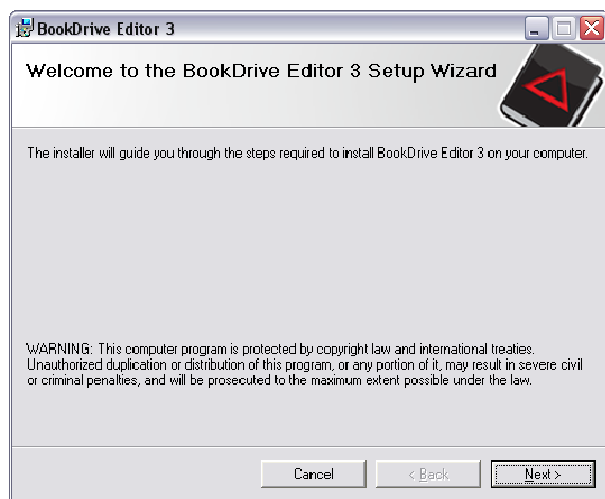


How to Install the Software

7. After installation of BookSnap software is complete, select **Close** (to proceed to install another software).

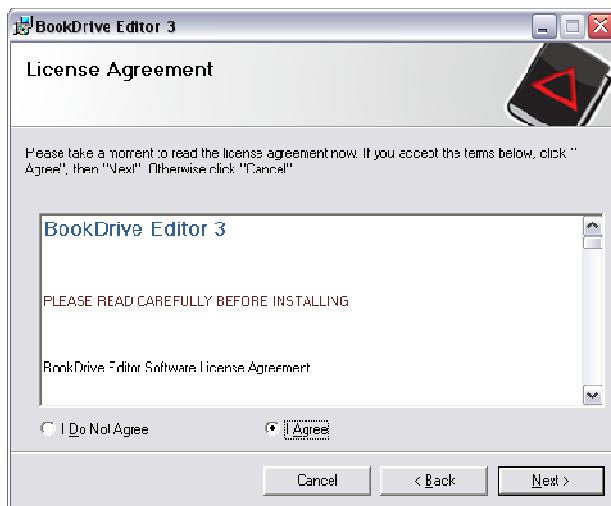


8. The Welcome screen to BookDrive Editor will appear.

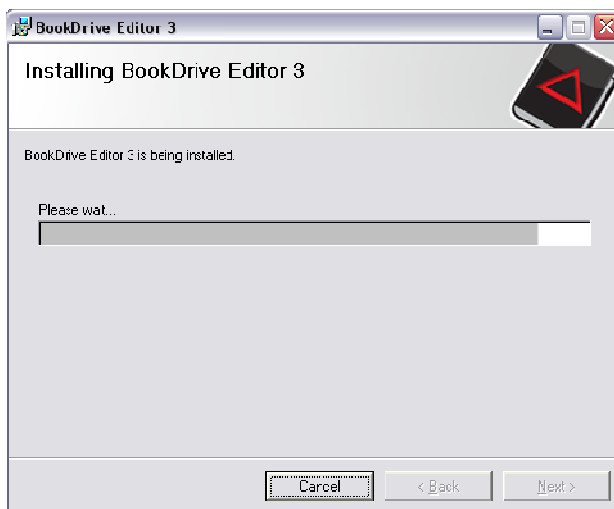


How to Install the Software

- Review the License Agreement. If you agree, select **"I Agree"** and hit **Next**.

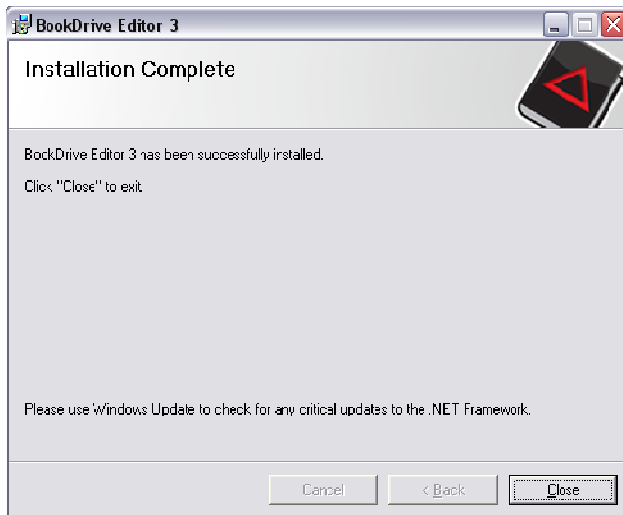


- Proceed until the installation is complete.



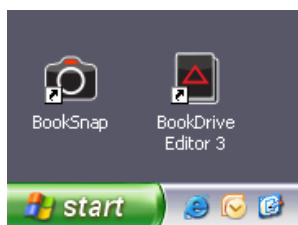
How to Install the Software

11. It will appear like this when the installation of BookDrive Editor is complete.



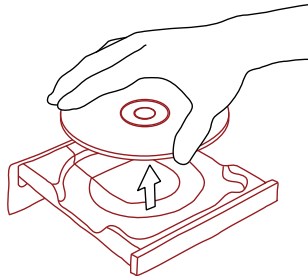
Click **Close** and then **OK**.

12. BookSnap and BookDrive Editor shortcuts will now appear on your desktop.



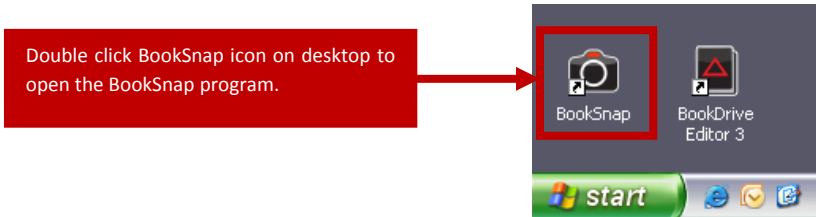
How to Install the Software

13. Remove the disk from the computer's drive.

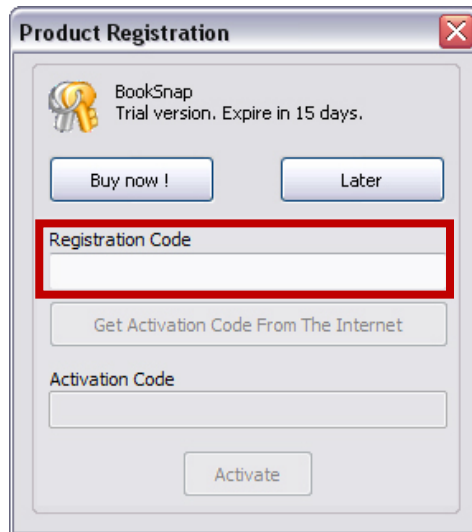


How to Activate the Software

After the software installation is complete, next step is to activate the software.



1. After opening the program, you will see the following dialog that asks for registration.



2. Please fill in your **Registration Code**. (Your Registration Code is located on the back of your CD case)

How to Activate the Software

3. Once you have filled in the Registration Code, click **Get Activation Code From The Internet**.



How to Activate the Software

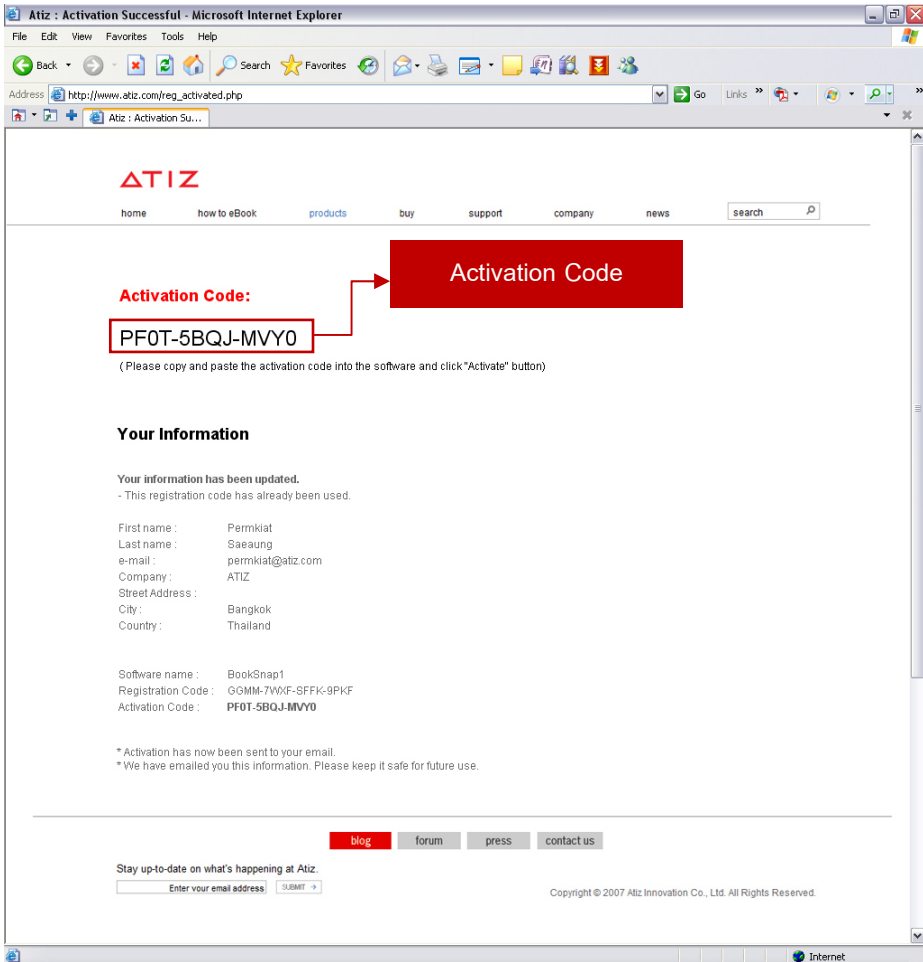
4. You will be redirected to Atiz online registration page.

Please fill in your information.

Atiz will use this information to contact you in the future about the software upgrades when they are available. Once you have filled in the information completely, click **Submit**

How to Activate the Software

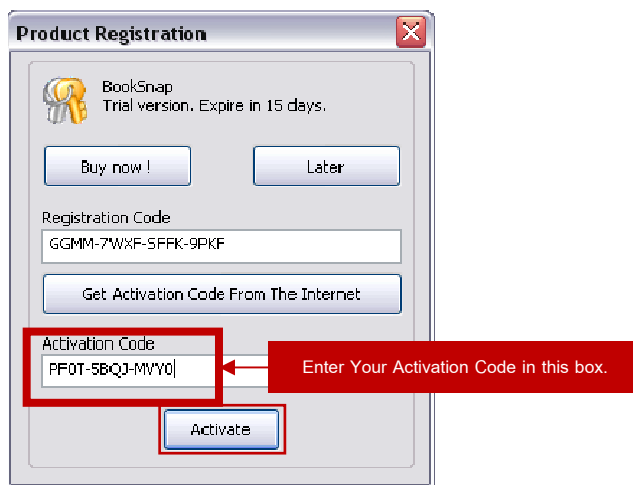
- The information will be sent to Atiz server. If your information and the Registration Code are correct, you will receive the Activation Code.



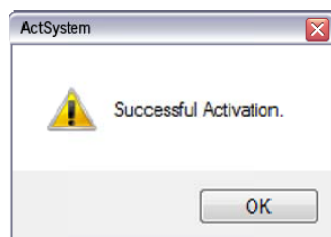
How to Activate the Software

- The Activation Code is used to activate your copy of the software. Copy your Activation Code and paste it on the Registration window.

(MAKE SURE THERE IS NO BLANK SPACE IN THE BOX.)

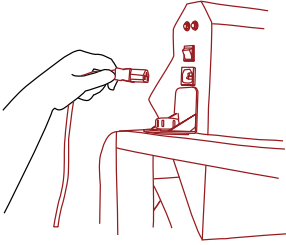


- Click **Activate** and the program will finish the installation successfully.

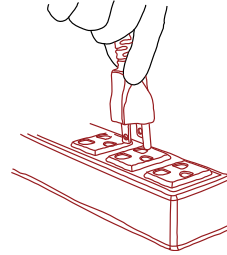


Note: Once you are done with the activation of BookSnap software, repeat this process with the activation of BookDrive Editor software.

How to Scan a Book



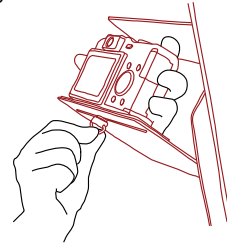
- 1.** Plug in the AC cord to the lamp. Make sure it is not connected to the power source and the switch is off.



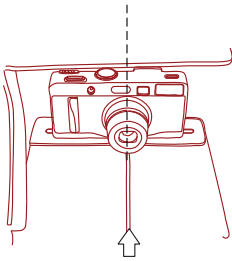
- 2.** Plug the AC cord into the power source (110VAC or 220VAC). The exact voltage rate depends on your country. Please also check the light bulb voltage rate before use.



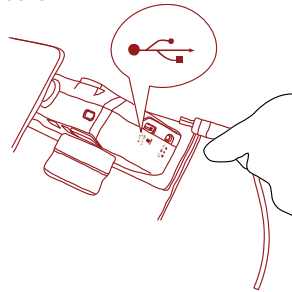
- 3.** Turn on the switch.



- 4.** Mount the camera on the mounting area. Secure it firmly by tightening the screw.

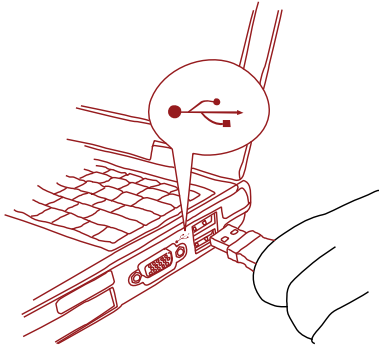


- 5.** Make sure the center of the lens is on the guide line.

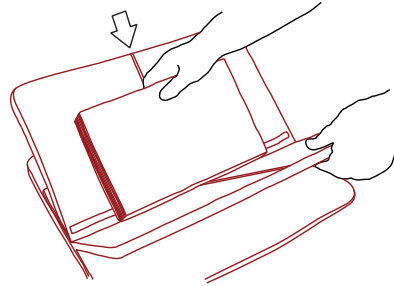


- 6.** Connect the USB cord to the camera.

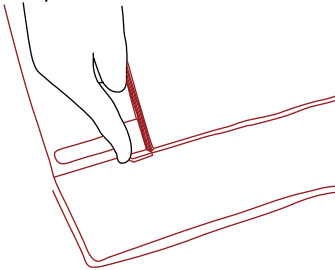
How to Scan a Book



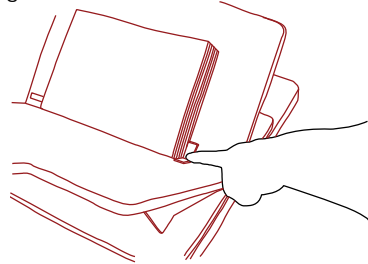
- 7.** Connect the USB cord to the computer.



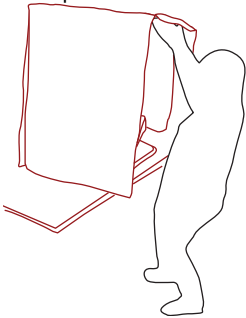
- 8.** Make sure the center of book is on the guide line.



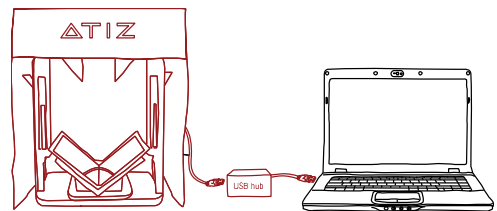
- 9.** Place the magnetic bookholder at the top of the book.



- 10.** Place the magnetic bookholder at the bottom of the book.

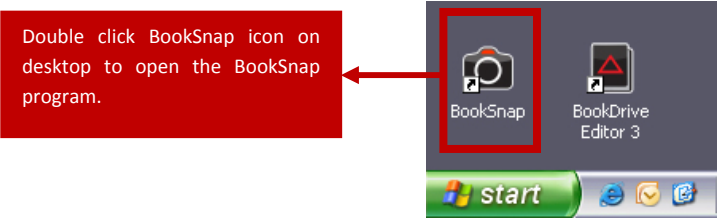


- 11.** Cover the BookSnap platform with the shade.

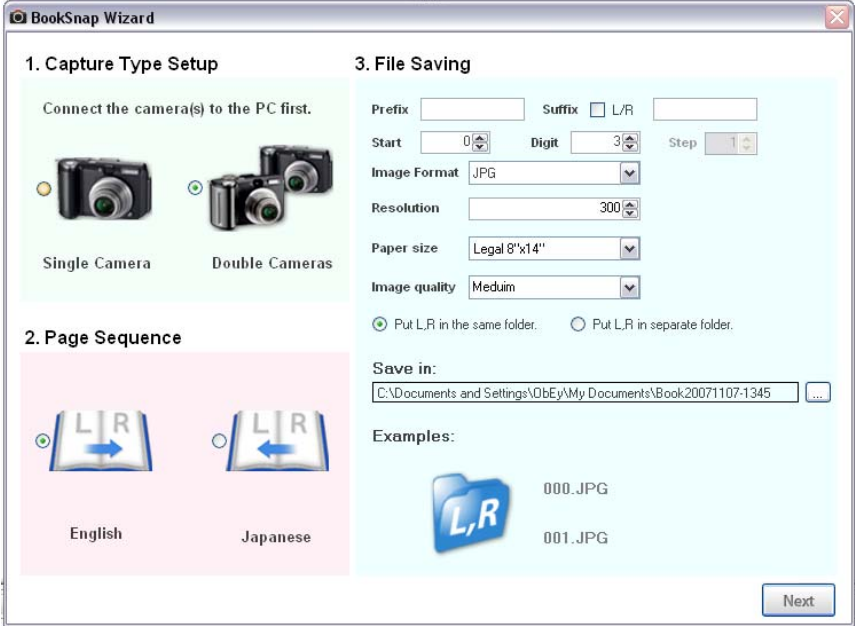


- 12.** You have successfully installed the BookSnap!

How to Scan a Book

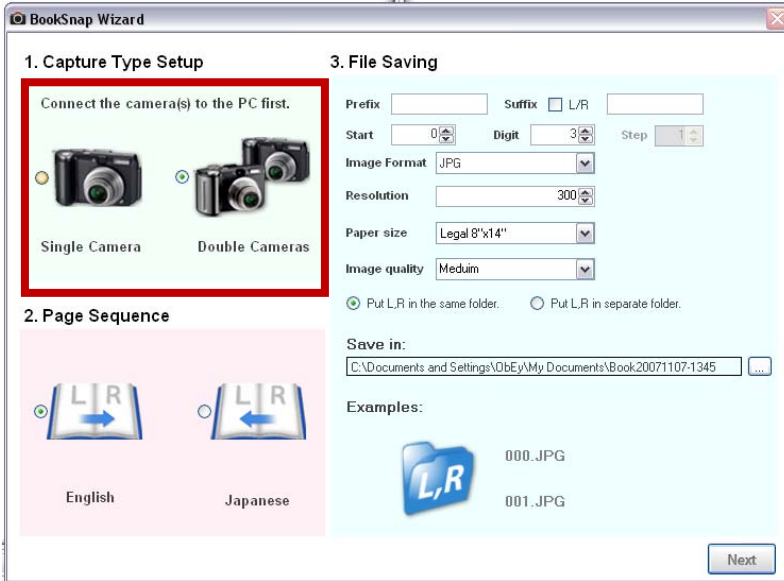


1. Start BookSnap software by double clicking the program icon. The program will appear like this.



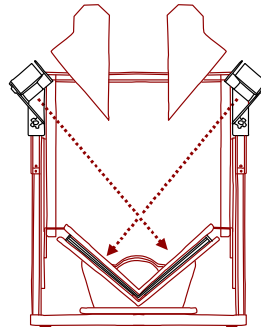
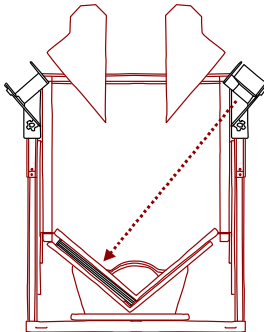
How to Scan a Book

- Please select whether you are going to use just one camera or two cameras to scan a book.



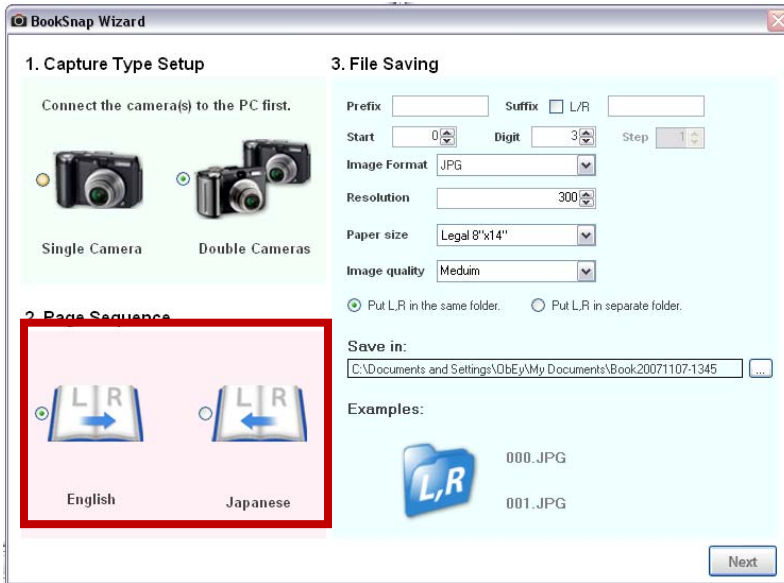
Select **Single Camera**
if you have only one camera

Select **Double Cameras**
if you have two cameras.



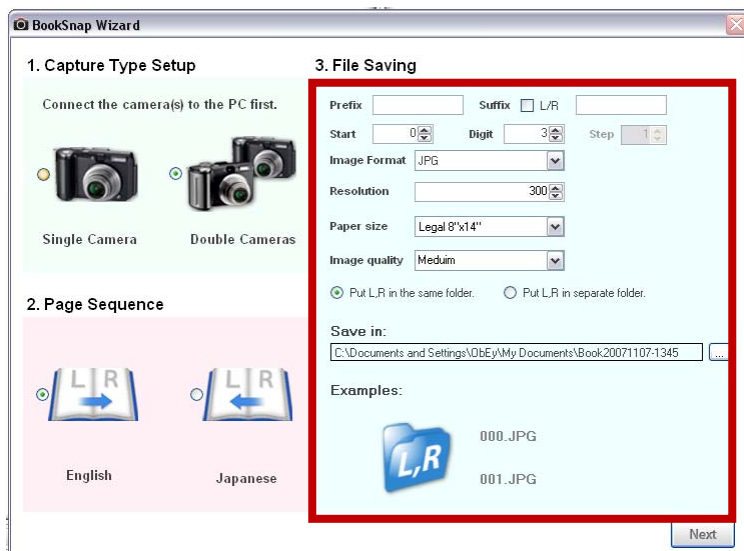
How to Scan a Book

- Next, select if you want page sequencing to go from left to right (this is the case for most countries) or from right to left (e.g. Japanese or Korean books, etc.)



How to Scan a Book

- Next, select file saving options.

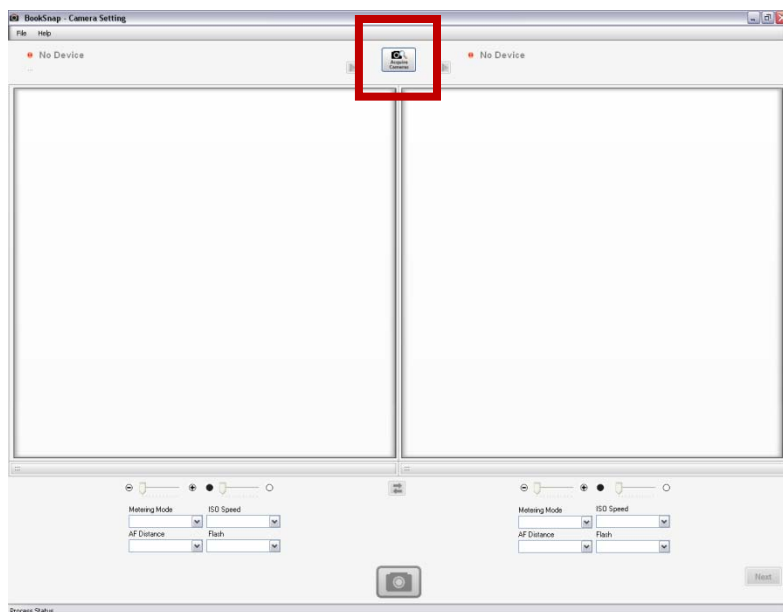


- After you are done with the Wizard, click **Next** to proceed to next stage where you will be able to change settings of the cameras, test the cameras and preview images.

How to Scan a Book

6. To be able to change settings and shoot test images, the computer first needs to connect to the cameras.

Click **Acquire cameras**, BookSnap will search for any cameras that are currently connected with the computer.



How to Scan a Book

IMPORTANT: Causes and solutions if BookSnap software could not find and acquire all the cameras you need.

a) **Check camera compatibility**

Unsupported cameras? Make sure that the camera model used is supported by BookSnap software.

b) **Windows XP only for BookSnap software**

Is it Windows Vista? Currently, BookSnap is only compatible with Windows XP.

c) **Canon Drivers**

Where are drivers? Have you already installed drivers of the Canon cameras? If not, please install the drivers of the Canon cameras first. You can find them from the Canon CD that comes with the cameras or download from Canon website.

d) **USB Connection**

Please also ensure that the USB cables are properly connected between the camera and the computer.



e) **Camera is on**

Make sure the camera is turned on.

f) **Battery**

Is the camera running low on battery? If this is the case, please recharge the battery and use a fully charged battery.

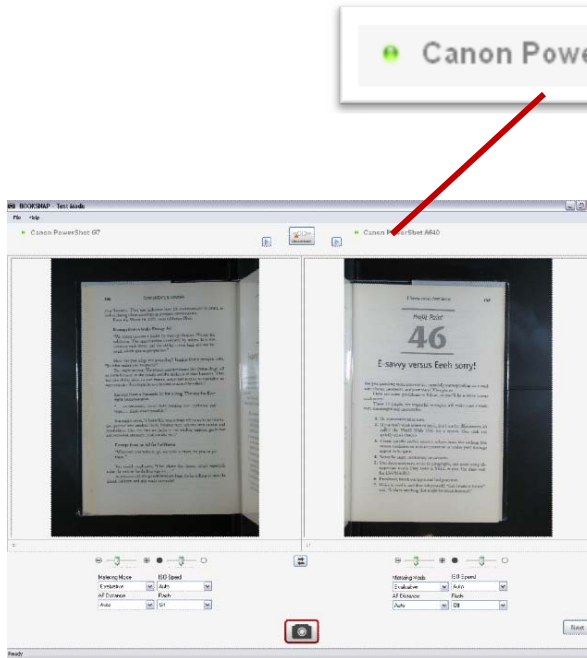


g) **Playback Mode**

Some camera models have a separate Playback mode. If this is the case, please set so that your camera is at Playback mode.

How to Scan a Book

7. If the computer can locate the cameras, there will be a green sign showing that the cameras are now connected.

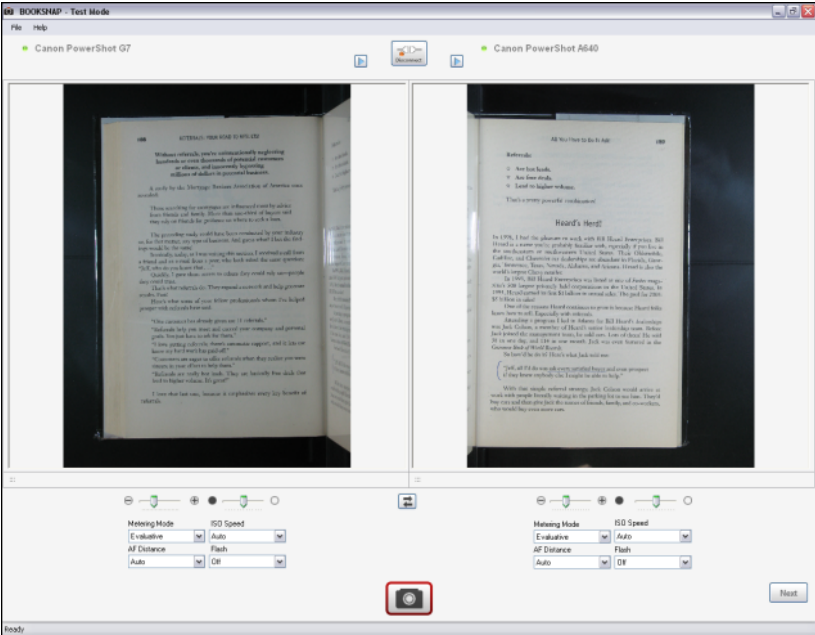


The red sign means that the cameras are still not connected. If this happens, make sure you have taken all the steps as shown in the previous page.

If the system still cannot acquire the cameras after following all the instructions, please contact Atiz for technical support.

How to Scan a Book

As the cameras are acquired, the cameras will capture some sample shots and here is the page that you should see.

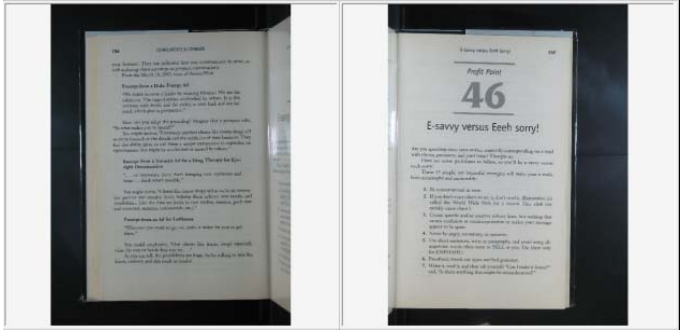
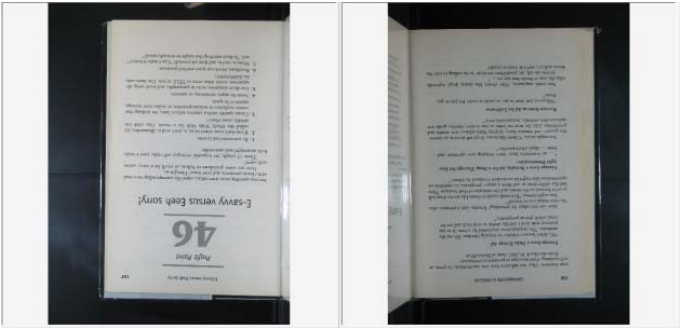


How to Scan a Book

8. If the pages appear inverse like this, you can reverse them by clicking **Reverse**

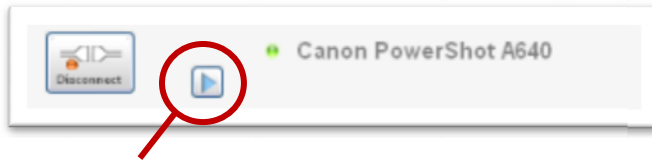


button and the pages will become reverse like this.

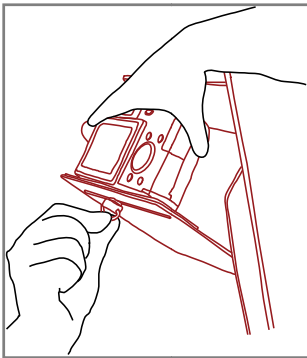


How to Scan a Book

9. To conveniently adjust the relative position of the cameras and the position of the book, you can see live preview (it is like a video stream showing the current position of the page).



Preview button



During that time, it is easier for you to change the position of the camera and/or the position of the book. The video preview will help you easily get images straight on the screen.

10. There are some neat things you can do within the BookSnap software. For example, you can zoom in or zoom out. You can also adjust brightness and other settings of the cameras. What kind of settings you can adjust depends on the model of the cameras.



Zoom slider



Brightness slider

How to Scan a Book

Metering Mode	ISO Speed
<input type="text" value="Evaluative"/>	<input type="text" value="Auto"/>
AF Distance	Flash
<input type="text" value="Auto"/>	<input type="text" value="Off"/>

Most Canon camera models allow you to adjust the Metering Mode, ISO Speed, AF Distance and Flash of the cameras.

Note: For good picture quality purpose, flash should always be off in BookSnap.

11. To see what kind of images those settings will produce, click this button will let you shoot sample shots.



The sample shots will not be saved. They will be discarded as you test next sample shots.

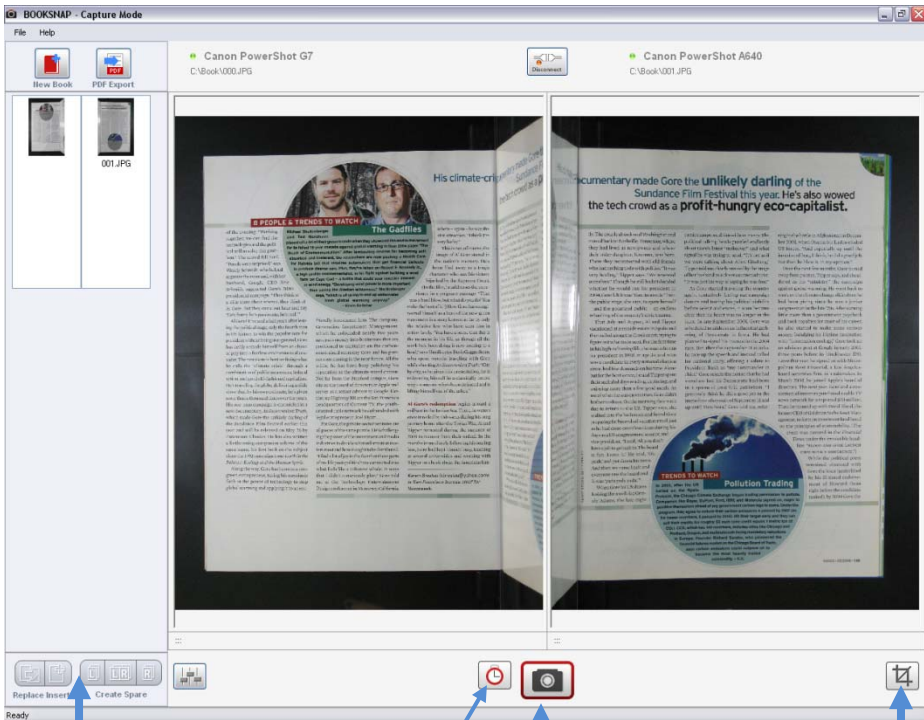
Once you are satisfied with the images that the cameras can produce, proceed to the actual scanning process by hitting



How to Scan a Book

Now it's time for some serious scanning.

12. This is the main interface of the program during scanning.



Fix Work: Use when you want to add missing pages, add spare pages, or replace bad looking pages.

Capture Button

Auto Capture: If you are tired of having to press the Capture Button for every page, click this to turn on Auto Capture Mode. You just keep flipping the pages, BookSnap will keep shooting the images for you automatically.

Crop Button: Press this to enable Instant Crop.

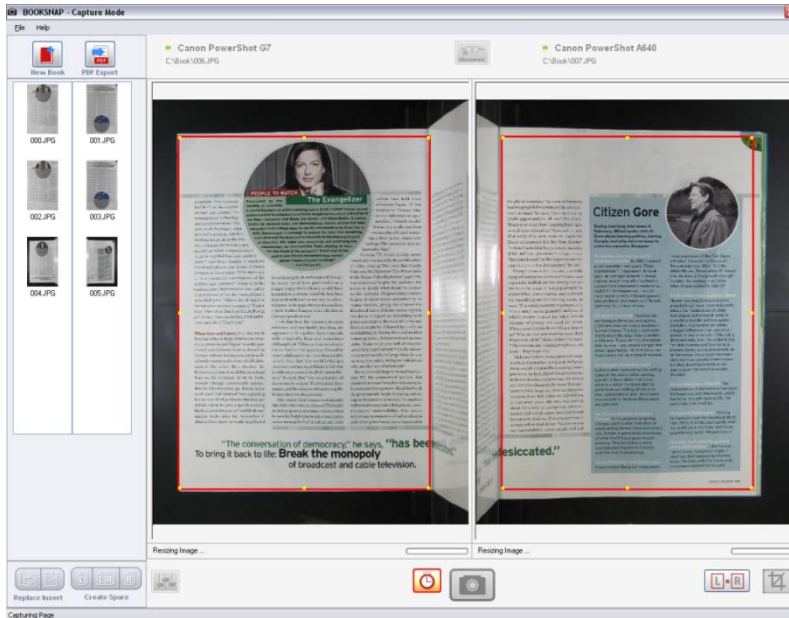
As pages are scanned, they will also be cropped in real time according to the crop area that you set.

How to Scan a Book

13. The process to scan a book is easy. You just hit **Capture Button** and then turn a page, hit **Capture Button** again until completion.

If you are tired of button pressing, click **Auto Capture** to turn the Auto Capture mode on and have the program keeps shooting the images for you automatically.

14. If you want your images to be cropped at the same time during scanning, click **Crop Button**.



The red rectangle line represents an area to be cropped. What's inside the rectangle will be kept. What's outside will be thrown away.

How to Scan a Book

Some shots are not great and some pages are missing and I want to correct.

15. You can do that by relying on the set of buttons that will allow you to fix the pages.



Replace

Replace

Use when you want to replace an existing image with a new one.

Examples:

- The images you got are not very clear.
- You got your hands in the shot.
- You haven't done turning pages yet.
- Page is creased and you want to replace

Use mouse to select the thumbnail of the image you want to replace. Then click **Replace**.



Insert

Insert

Use when you have skipped a page and you want to insert a new page somewhere in between.

Use mouse to select the thumbnail of the image that you want to insert new pages in between. Then click **Insert**.



Create Spare

Create Spare

Sometimes you just want to have spare pages for comparison purpose so that you can select the best one to use at the end.

Use mouse to select the thumbnail of the image that you want to create its spare.

How to Scan a Book

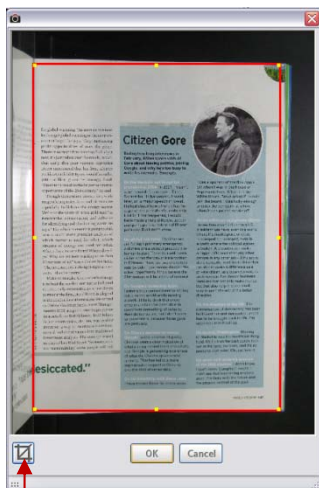
Note:

Under **Instant Crop**, the last page and the pages that are added using the **Replace**, **Insert** or **Create Spare** commands will not be cropped by the program.

You must do a little more to help crop those pages.

Steps:

1. Double click the thumbnail of the page that you want to crop manually and you will see the following dialog.













Crop Button

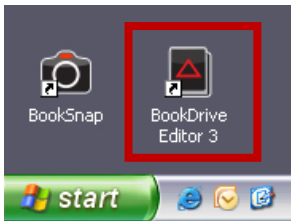
2. Click Crop Button
3. Set area you want to crop.
4. Click **OK**. Done.

How to Edit a Book

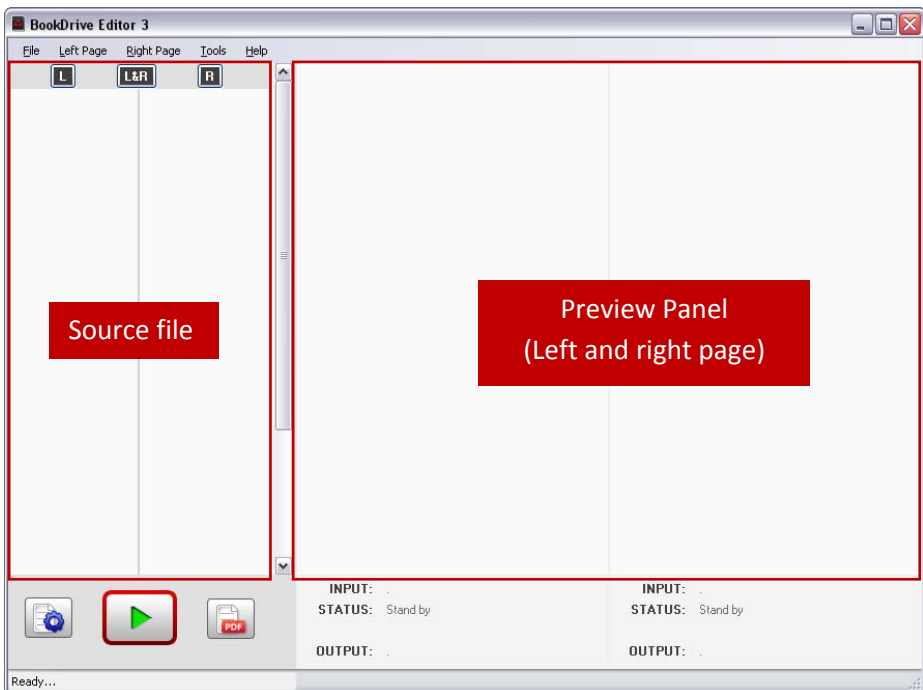
Key Features of BookDrive Editor 3

	Rotation Rotates images to the correct orientation.
	De-skew Compensates for image skew during scanning, resulting in straight images.
	Auto Level Automatically adjusts to the level in the histogram of the images to make them their color look smoother.
	Crop Crops unwanted area of the images out.
	Brightness and Contrast Allows the adjustment of brightness and the contrast of the images. Brightness and Contrast adjustment.
	Sharpen Sharpening makes images look sharper. It brings out details that were not there before.
	Black border removal Eliminates the black edges typically generated by scanners with black backgrounds. It also reduces the file size while improving legibility.
	De-speckle Helps eliminate noise such as speckles and streaks that are either present on the original document or generated during the scan.
	Background removal Removes the unwanted, dirty or dusty background from the document and leave only clean and clear background.
	Resize Images can be resized to any standard size or custom size.
	File storage and retrieval Supports TIFF, multi-page TIFF, PDF, JPEG file formats
	Image compression TIFF compressions: CCITT_G3, CCITT_G4, LZW JPEG compressions: JPEG Quality, LZW

How to Edit a Book



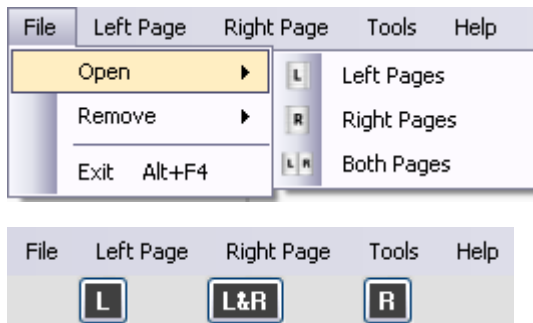
Start BookDrive Editor software by double clicking the program icon. The program will appear and should look like this.



The main interface of the program consists of the left area and the right area. The left area lists all the source files to be processed. The right area is a preview panel, which will show output images as they are being processed.

How to Edit a Book

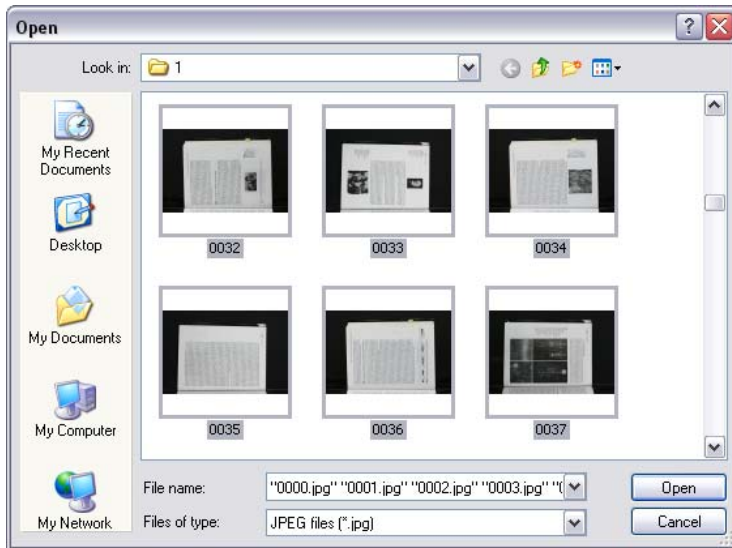
To start, you need to add images to the program. You can do that by either selecting from the menu or simply click its button.



There are many ways to add images to the program:

1. By selecting from the menu. Select File / Open / Left Pages, Right Pages, or Both Pages.
2. By clicking the button.
There are 3 buttons relevant here:
the one showing "L" (meaning to add only the left pages);
the one showing "L&R" (meaning to add both left and right pages); and
the one showing "R" (meaning to add only the right pages)
3. By drag and drop. You can also drag and drop left images to the left column and drag and drop right images to the right column.

How to Edit a Book



If you click the button, you should see this open window.

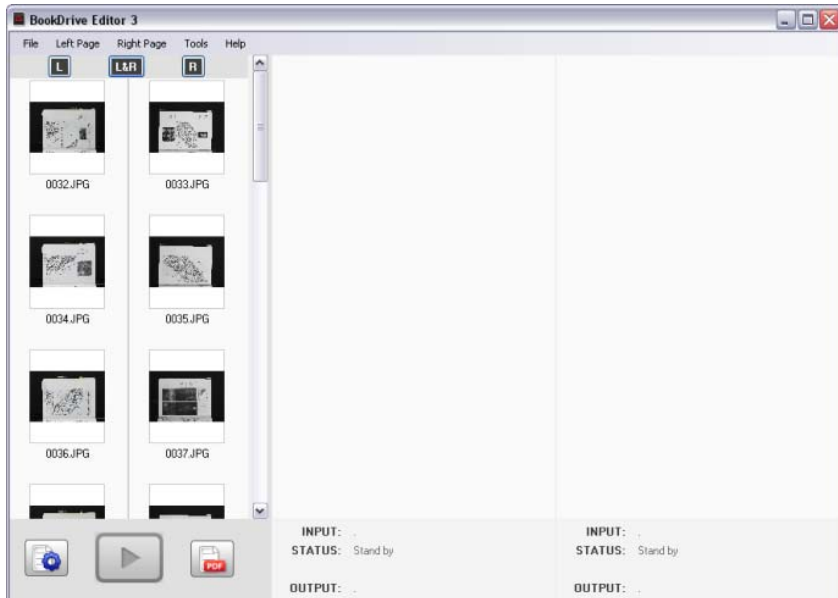
The open window allows you to select the files you want to add for processing.

To select many files, do a mouse drag or hold **Ctrl** while clicking on each image.

To select all, press **Ctrl + A**.

After select, click **Open**. The program will add those selected images and show their preview thumbnails.

How to Edit a Book



How images are sorted and put in an order?

The software will automatically sort the selected images based on their file names. The ones with lower values will be on top. The ones with higher values will be at the bottom.

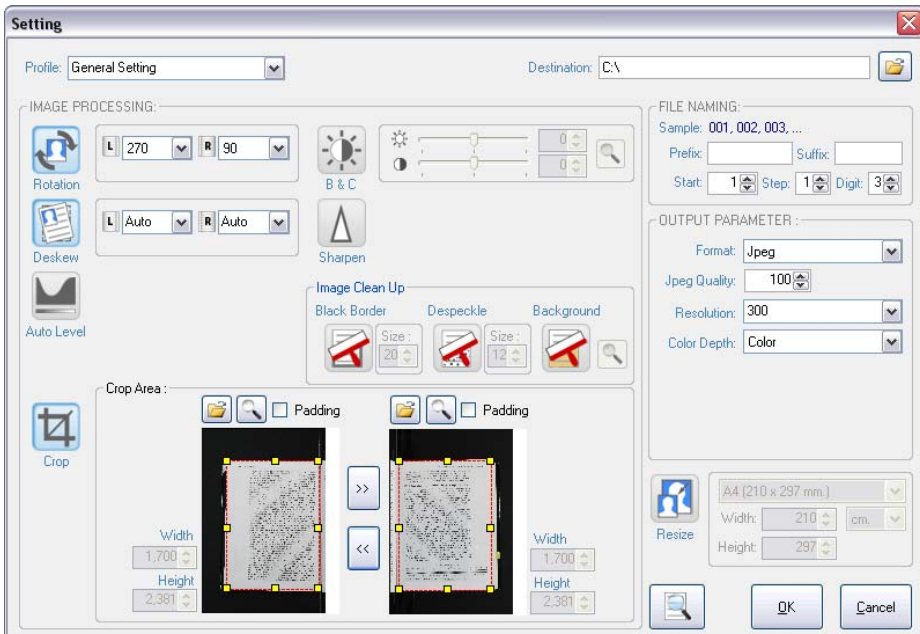
If you select the both L&R page option, the program will sequentially put the first one on the left, the second one on the right, the third one on the left, the fourth one on the right, and so on until the last image.

How to Edit a Book

Next step is to do settings.

Click **Settings** button.

You will see the Setting window as shown here:



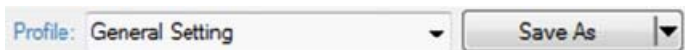
This is the page where you set all the parameters to make the program produce the final images to your liking.

You do not have to do new settings every time you want to process images. BookDrive Editor allows you to save all those parameters in what is called a **“Profile”**.

Once you have saved the Profile that contains the parameters that you want, next time that you use BookDrive Editor, just select the Profile that you save and open it for use.

How to Edit a Book

The area that allows you to **open**, **save**, and **delete** a Profile looks like this:



Settings

To enable any image operation, just press the icon representing the intended image operation.

For example, this is what will appear if you want to enable image rotation.

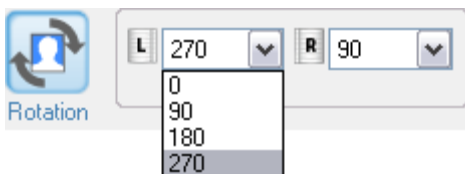


Image rotation is disabled.



Image rotation is enabled.

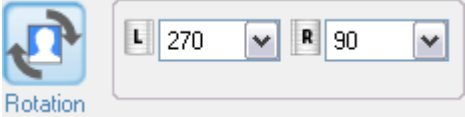
Rotation



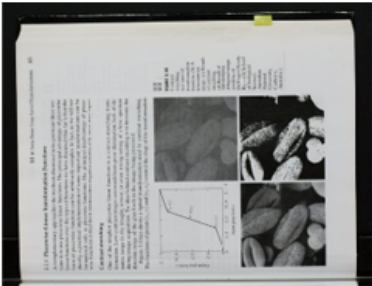
For rotation, you have options to select to rotate 0, 90, 180 or 270 degrees.

How to Edit a Book

Example:



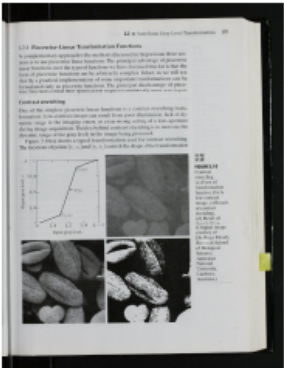
Left page



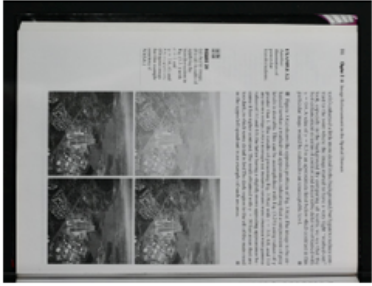
Before



After



Right page



Before



After



Rotation

How to Edit a Book

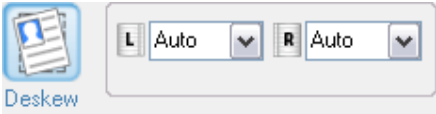


Deskew

Compensates for image skew during scanning resulting in straight images.



Select **Auto** if you don't know the exact degrees to rotate. Alternatively, you can manually set a value that you want the image to be rotated (between -15 to 15 degrees).

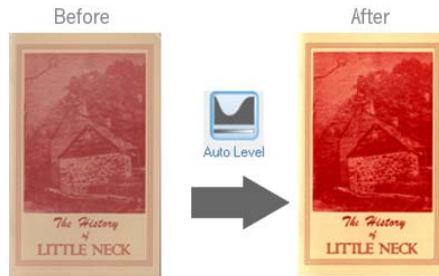


How to Edit a Book



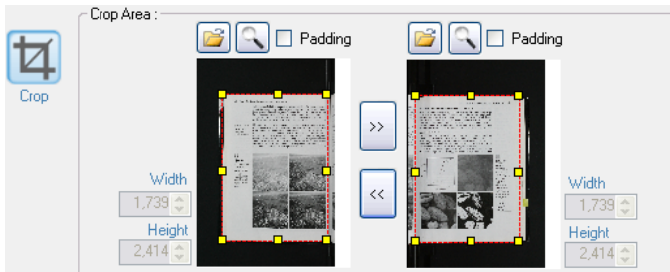
Auto Level

Automatically adjusts to the level in the histogram of the images to make them their color look smoother.



Crop

Crops unwanted area of the images out
The cropping setting area looks like this:



Some available options under cropping image operation include:

How to Edit a Book



Load another image to see its thumbnail related to cropping.



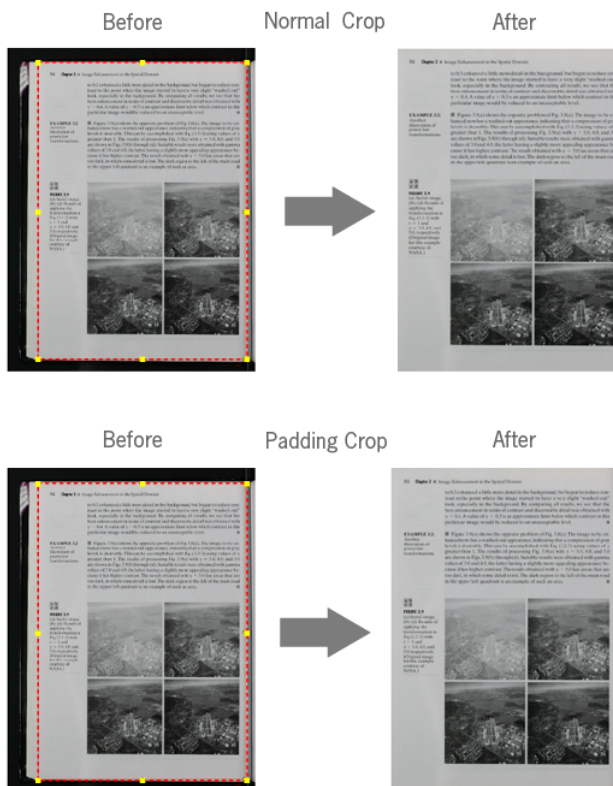
Preview of how output will look like after cropping and padding.



Copy the parameters of the left page to the right.



Copy the parameters of the right page to the left.



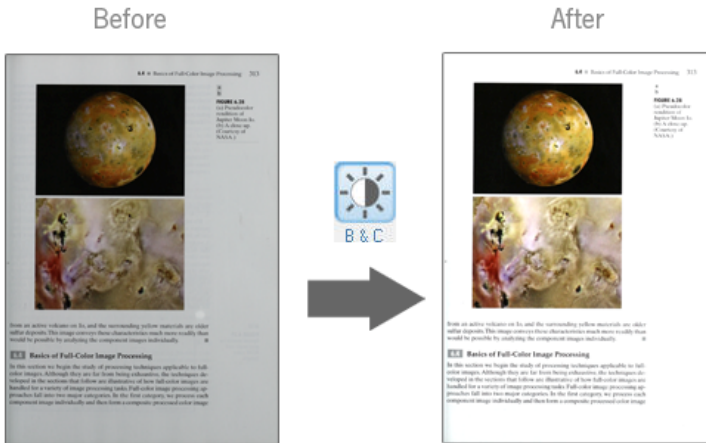
Note: The red rectangle that marks a crop area can be moved by a mouse drag.

How to Edit a Book



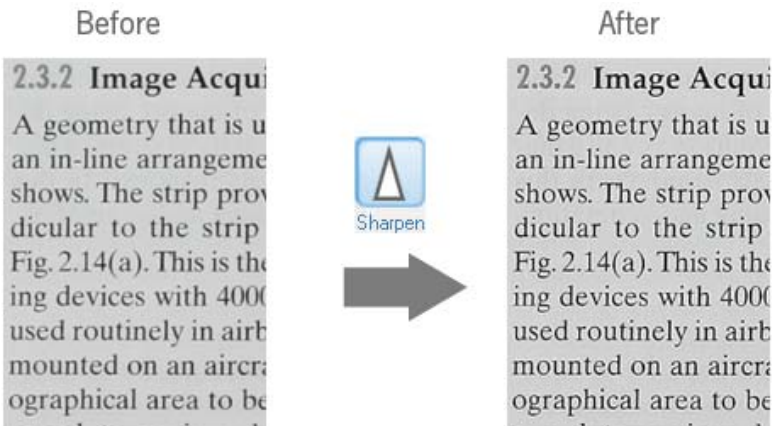
Brightness and Contrast

Allows the adjustment of brightness and the contrast of the images.



Sharpen

Sharpening makes images look sharper. It brings out details that were not there before.



How to Edit a Book



Black border removal

Eliminates the black edges typically generated by scanners with black backgrounds. It also reduces the file size while improving legibility.

Before

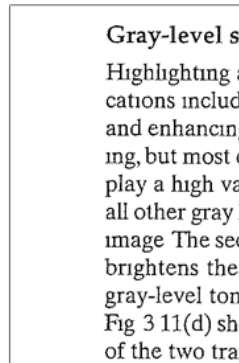
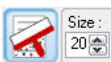
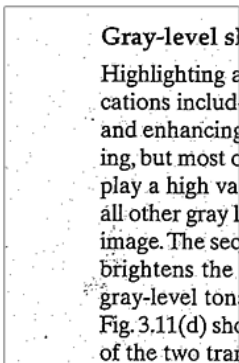


After



De-speckle

Helps eliminate noise such as speckles and streaks that are either present on the original document or generated during the scan.

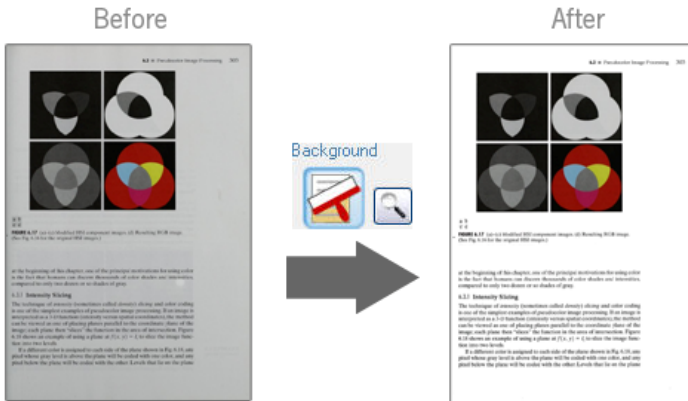


How to Edit a Book



Background removal

Removes the unwanted, dirty or dusty background from the document and leave only clean and clear background.



Resize

Images can be resized to any standard size or custom size.

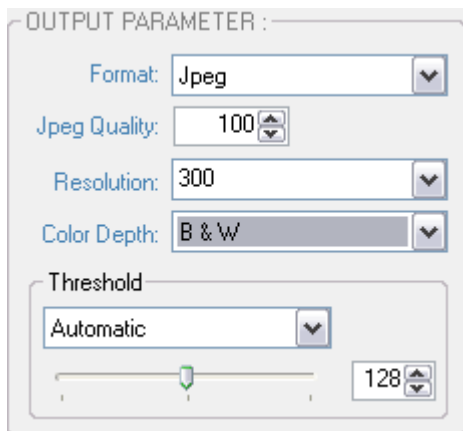
Resize

Images can be resized to any standard size or custom size.



How to Edit a Book

Output file selection



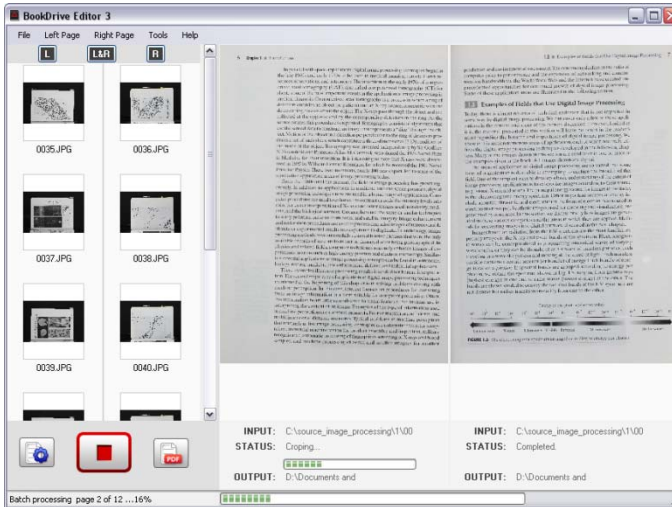
- The available output format options are TIFF or JPEG.
- Available compressions for TIFF are LZW, CCITT G3, CCITT G4
- Users can also select the level of compression for JPEG format by setting its quality level.
- Resolution is where you can set DPI of the output image. You can select 100, 200, 300, 600 DPI or specify the exact desired DPI.
- Available color options are: Black and White, Grayscale and Color.
- As for Black and White conversion, there are many types of conversions allowed. This has to do with the threshold of how a given a pixel is converted to either a black or white pixel.
 - Fixed (threshold value is set at 128)
 - User defined (users can define other threshold values)
 - Automatic (the level of optimal threshold will automatically be selected by the computer).
 - Highest Quality (this setting can be known as dynamic localized thresholding, which means there can be many thresholding values on a page. If selected, the program will scan the entire page and automatically adjust the thresholding values for optimal values throughout the pages. This setting will take the longest time but will provide the best quality.)

How to Edit a Book



Run batch

Once all the settings have been made, it's time to run the batch image processing operations. Simply hit the Run Batch button.



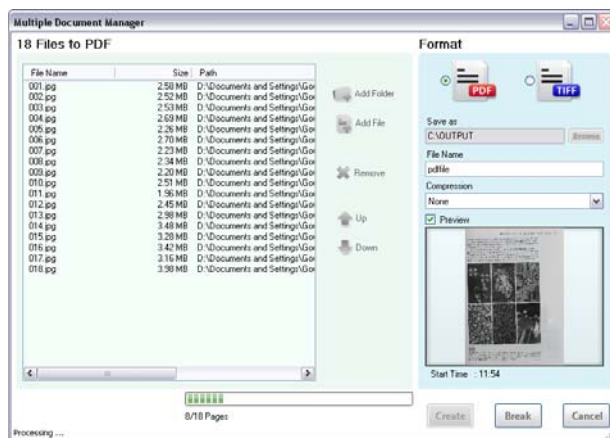
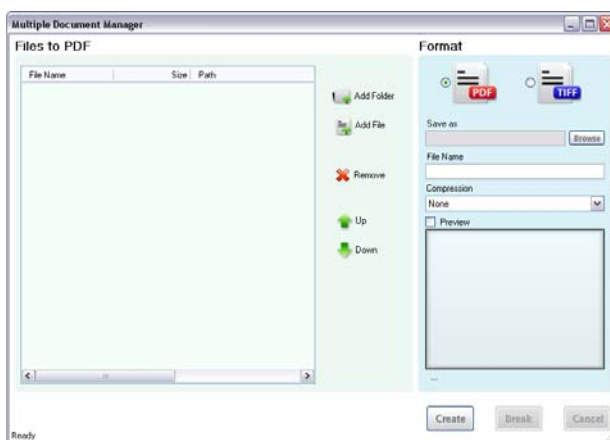
If you want to stop, click the same button again.

How to Edit a Book



Creating PDFs

BookDrive Editor 3 and BookSnap can create PDFs or Multi-page TIFF by clicking the **PDF** button. Once clicked, you will see the following window.



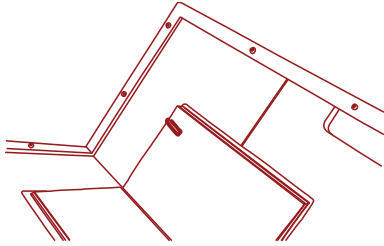
Steps

1. Click **PDF** button.
2. Select the images you want to export to PDF.
3. Select the output format (PDF or TIFF) and other parameters.
4. Click **Create**.

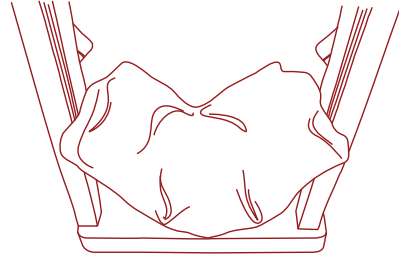
Maintenance

Care and Maintenance

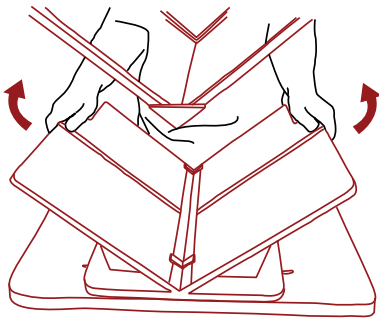
Occasional maintenance helps to improve the image quality. The amount of maintenance needed depends on the amount of use, the scanning environment, and the type of book, etc..



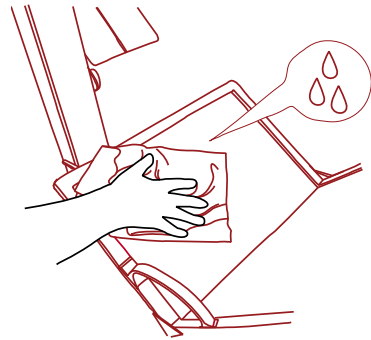
- 1.** Please ensure that there are no sharp materials attached to the book such as paper clip which will damage your transparent plate.



- 2.** Cover your scanner's transparent plate with a clean cloth to protect it.

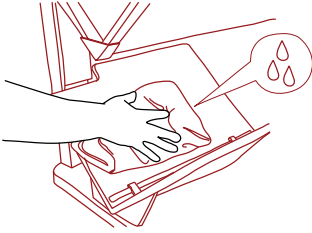


- 3.** Raise the transparent plate to the top.



- 4.** Clean the transparent plate by using a soft, lint-free cloth sprayed with glass cleaner solution or clean water.

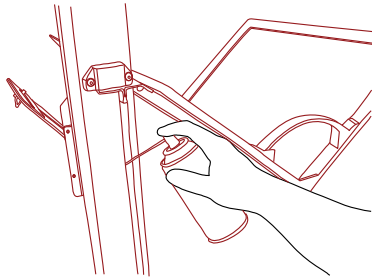
Maintenance



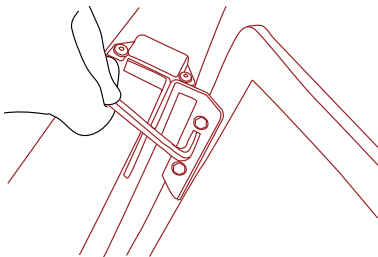
- 5.** Clean the cradle with a wet cloth. Using only clean water



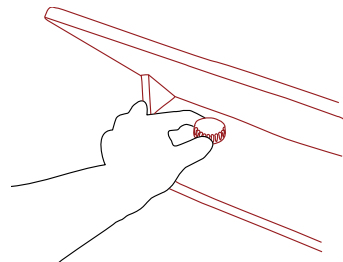
- 6.** Do not use acetone, benzene, carbon tetrachloride or the organic solvent which will damage transparent plate and cradle.



- 7.** Lubricate the rail by using lubricant oil such as WD-40 or SONAX. Please cover your transparent plate before use. Do not put too much oil on the rail.



- 8.** Tighten the transparent plate screw.



- 9.** Re-adjust the cradle by locking the cradle screw and tightening it when finished.

Supported Cameras

Canon Powershot G7



Canon Powershot A640



Canon Powershot A620



Canon Powershot S80



Canon Powershot G9



Canon Powershot S3IS



Canon Powershot SX100IS



Canon Powershot S5IS



(As of December 2007)
For most updated list, please check at
Booksnap.atiz.com

Technical Support

More questions?

Please visit http://www.atiz.com/cust_service for more information or contact support@atiz.com for your problems.